

REMARKS

Claims 1-3, 5-6, 8-11, 14, and 16-18 have been rejected. Claim 15 is currently withdrawn from consideration. Claims 4, 7, 12-13, and 19-20 have previously been canceled. By way of this paper, new Claims 21-25 have been added, with claims 21 and 22 representing original claims 4 and 7, and new claims 23-25 being directed towards the features of original claims 4, 7, and 5, but dependent upon claim 6. It is further noted that the Listing of Claims presented herewith reflect the previously proposed amendment to claim 1 filed July 2, 2008 after final rejection, as such amendment should be entered in view of the reopening of prosecution and thus withdrawal of the finality of such previous rejection.

DECLARATION

Regarding the Declaration of Jiann H. Chen and Joseph A. Pavlisko under 37 CFR 132 submitted November 20, 2007, the Examiner notes that the Declaration does not reflect the claimed invention. Submitted herewith is a second Declaration, which corrects inadvertent errors in the description of Declarants' work in the previous Declaration as noted by the Examiner, and which clearly establishes that the subject matter of the preamble of original claim 19 reflects Declarants' own work, and that such subject matter is not admitted prior art with respect to the instant application. The Examiner's further statement that it is the Examiner's conclusion that the preamble of the Jepson format claim of original claim 19 is not Declarants' own work is noted, but such conclusion is simply not supported by any cited evidence.

Claim Rejections – 35 U.S.C. § 103

Claims 1-3, 5-6, 8-11, 14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAA) and applied as evidence Shifley et al., (US 6,259,873), Hartley et al. (US 4,853,737) and Chen et al. (US 5,781,840), and further in view of Wallin (US 3,799,859), Kawada et al. (JP 2000131864), Bird et al. (US 3,552,898) and Weber et al. (US 5,750,160). This rejection is respectfully traversed.

The Examiner states that Applicants admit that toner fuser rollers typically include a hollow cylinder core. While the location of such admission is not

identified by the Examiner, such a statement is found in the paragraph bridging pages 2-3 of the specification. The Examiner continues to erroneously equate such reference to a "hollow cylinder core" to the nickel sleeve employed in the present invention. There is no basis for such position, however, as by the use of the term "core," it is clear such reference is directed towards the typical fuser rollers wherein the hollow cylinder is itself rigid and of substantial thickness so as function as the "core" of the roller itself (these type of roller cores are further described, e.g., in the cited Hartley et al. reference, at, e.g., col. 7, lines 60-66) , to which the further described layers are directly coated. Such reference is not to a sleeve member adapted to be positioned over a machine mandrel to function as a roller, as in such embodiment it is the mandrel which in effect functions as the roller core. The use of the term "sleeve" as employed in the present invention accordingly clearly distinguishes from the "admitted prior art" regarding hollow cylinder cores. While the claimed use of a coated sleeve in combination with a mandrel itself clearly differentiates from a rigid core itself, it is further noted that claim 5 additionally sets forth thickness limitations for the sleeve that further distinguish the claimed invention from the prior art use of rigid cylindrical cores upon which the remaining layers of the fuser roller are directly coated.

The Examiner further states that Shifley et al., Hartley et al. and Chen et al. are applied as evidence that all claimed limitations were known in the art except for the matching coefficients of thermal expansion of the sleeve and mandrel. The Examiner, however, relies upon misinterpretations of the cited art. In particular, the Examiner states Shifley et al. is applied as evidence that replaceable fuser rollers comprising a hollow cylinder core, which is often metallic, with a roller cushion layer formed about the roller, was known in the art (citing column 5, lines 16-26). Such reference in Shifley et al., however, is to a replaceable photoconductive tube 14, not a fuser roller as alleged by the Examiner. The replaceable tube 14 of Shifley et al. in any event is not a sleeve adapted to be positioned on a machine mandrel, but rather is itself a relatively thick (8 mm as noted at col. 5, line 18) rigid tube (as evidenced by it being supported only at the ends thereof by gudgeons 15, 15', rather than by the drumshaft itself. While a mandrel 17 is disclosed at col. 5, lines 31-38 for use with a removable adhesive sleeve to form an intermediate image-transfer drum 16, there is no teaching of a replaceable fuser member in accordance with the

present claimed invention. The Examiner's reference to Hartley et al. and Chen et al. as disclosing steps a-g is noted, but to the extent the Examiner interprets such reference as teaching such steps on a nickel sleeve adapted to be positioned on a machine mandrel, such interpretation is simply not supported by such references.

The Examiner further cites Wallin as teaching formation of a nickel belt on a mandrel made of a material that exhibits different temperature coefficients of expansion than the nickel belt for facilitating the removal of the formed belt from the mandrel by cooling the mandrel and the belt, and argues it would have been obvious to have used aluminum, copper, or nickel sleeve on a steel mandrel in the "cited prior art" with the expectation of facilitating the removal of the belt from the mandrel by cooling as taught by Wallin. While it is initially noted that the other "cited prior art" simply does not teach metal sleeves on mandrels as discussed above, the teachings of Wallin in any event would not be applicable to the present claimed invention as the present invention is not directed towards formation of a metal belt on a mandrel, and further the present invention is directed towards employing a metal sleeve and mandrel having similar coefficient of thermal expansion to minimize differential expansion during formation of the layers formed on the metal sleeve, rather than being directed towards the use of materials having substantially different coefficients to facilitate separation of a metal layer formed on the mandrel. The further references to Kawada et al., Bird et al., and Weber et al. with respect to forming nickel layer on a metal mandrel are also noted, but again the invention is not directed towards formation of a metal layer on a mandrel, but rather the formation of primer, cushion, and topcoat layers on a nickel sleeve which is itself mounted on a mandrel. Clearly, the applied references are directed towards different purposes and apply different solutions, and the proposed combination simply would not teach or suggest the claimed invention.

A prima facie case of obviousness has clearly not been established, as the "admitted prior art" with respect to hollow cylinder cores referred to by the Examiner does not relate to the sleeve employed in the present claimed invention, and as the further cited art clearly does not teach or suggest the present claimed invention. Rather, it is clear the Examiner has attempted to pick and choose unrelated aspects of the cited art in an attempt to recreate the claimed invention in a manner that could only be done with the impermissible use of hindsight based

on Applicants' own teachings. Reconsideration of this rejection is accordingly respectfully requested.

Claims 1-3, 5-6, 8-11, 14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shifley et al. in view of Wallin, Kawada et al., and Bird et al., further in view of Weber et al., and further in view of Hartley et al. and Chen et al. This rejection is respectfully traversed, as it relies upon erroneous interpretations of the cited art as discussed above, in particular that the tube 14 of Shifley et al. comprises a replaceable fuser member, and that such tube comprises a sleeve adapted to be positioned on a machine mandrel. To the contrary, as explained above, tube 14 is a photoconductive surface of an image-recording drum, not a fuser member, and tube 14 in any event is not a sleeve adapted to be positioned on a machine mandrel, but rather is a relatively thick, rigid tube supported only at its ends by gudgeons 15, 15'. The drum shaft itself is clearly spaced far from the inside of the tube 14, and thus, contrary to the Examiner's assertions, is not a mandrel for the tube. Further, as the secondary references of Wallin, Kawada et al., and Bird et al. are clearly directed towards solving distinct problems in distinct systems which would not be applicable to the tube 14 and drum shaft of Shifley et al., the further proposed modifications would clearly not have been suggested to one skilled in the art based on such teachings themselves, but rather are only proposed by the Examiner in the light of impermissible hindsight as explained above. As further explained above, the Examiner's further reliance upon Hartley et al. and Chen et al. as disclosing steps a-g is noted, but to the extent the Examiner interprets such reference as teaching such steps on a nickel sleeve adapted to be positioned on a machine mandrel, such interpretation is simply not supported by such references. Reconsideration of this rejection is accordingly respectfully requested.

Claims 1-3, 5-6, 8-11, 14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley et al. and Chen et al. in view of Shifley et al., further in view of Wallin, Kawada et al., and Bird et al., further in view of Weber et al. This rejection is respectfully traversed. As noted by the Examiner, Hartley et al. and Chen et al. fail to teach application of the process thereof to a nickel sleeve mounted on a mandrel with matching coefficients of thermal expansion of the sleeve and the mandrel. The Examiner's interpretation of the teachings of Shifley et al. are misconstrued as explained above, and thus such

combination clearly would not result in the claimed invention. Further, the application of the combination of Wallin, Kawada et al., and Weber et al. is further inappropriate, as such teachings are clearly directed towards solving distinct problems in distinct systems which would not be applicable to the tube 14 and drum shaft of Shifley et al., and accordingly the further proposed modifications would clearly not have been suggested to one skilled in the art based on such teachings themselves, but rather are only proposed by the Examiner in the light of impermissible hindsight as explained above. Reconsideration of this rejection is accordingly respectfully requested.

Claims 1-3, 5-6, 8-11, 14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of AAA in view of Shifley et al., Wallin, Kawada et al., Bird et al., Weber et al., Hartley et al., and Chen et al., or over a combination of Shifley et al., Wallin, Kawada et al., Bird et al., Weber et al., Hartley et al., and Chen et al., and further in view of Badesha et al. (US 5,141,788) for the reasons of record set forth in paragraph 8 of the Office Action mailed 10/10/2006. This rejection is respectfully traversed, as the added Badesha et al. reference does not overcome the basic deficiencies of the rejection as discussed above. It is further noted that all of such references are not asserted in the Office Action mailed 10/10/2006. It is further noted that the "AAA" relied upon in the Office Action mailed 10/10/2006 is different than the "AAA" cited in the previous rejections of the present Office Action. To the extent the Examiner is attempting to still rely upon the preamble of claim 19 as "admitted prior art" as set forth in the Office Action mailed 10/10/2006, such rejection is clearly improper in view of the Declaration submitted herewith. The rejection is further improper and traversed for the reasons essentially as discussed above with respect to the other rejections, as the applied references are either misinterpreted, or directed towards solving distinct problems in distinct systems, such that the present claimed invention clearly would not have been suggested based upon such references, but rather the Examiner has attempted to reconstruct the claimed invention based on impermissible hindsight of Applicants' teachings. Reconsideration of this rejection is accordingly respectfully requested.

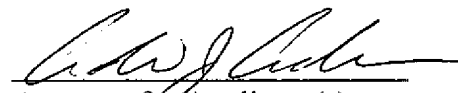
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over a combination of Shifley et al., Wallin, Kawada et al., Bird et al., Weber et al., Hartley et al. and Chen et al., and further in view of Petropoulos et al. (US 5,021,109) for the reasons of record set forth in paragraph 9 of the Office Action mailed 10/10/2006. This rejection is respectfully traversed, as the added Petropoulos et al. reference does not overcome the basic deficiencies of the rejection as discussed above. This rejection is further traversed for the reasons set forth above with respect to reliance on alleged "AAA."

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of AAA in view of Shifley et al., Wallin, Kawada et al., Bird et al., Weber et al., Hartley et al., and Chen et al., or over a combination of Shifley et al., Wallin, Kawada et al., Bird et al., Weber et al., Hartley et al. and Chen et al., and further in view of Schlueter, Jr. et al. (US 5,995,796) for the reasons of record set forth in paragraph 11 of the Office Action mailed 10/10/2006. This rejection is respectfully traversed, as the added Schlueter, Jr. et al. reference does not overcome the basic deficiencies of the rejection as discussed above. This rejection is further traversed for the reasons set forth above with respect to reliance on alleged "AAA."

It is respectfully submitted that, in view of the above amendments and remarks, this application is now in condition for allowance, prompt notice of which is earnestly solicited. The Examiner is invited to call the undersigned in the event that a phone interview will expedite prosecution of this application towards allowance.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.